## THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 13

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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 $\underline{\mathtt{Ex}\ \mathtt{parte}}$  ANTHONY C. SHUCOSKY and WILLIAM P. SEELEY

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Appeal No. 95-4865Application No.  $08/240,505^1$ 

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HEARD: June 09, 1997

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Before LYDDANE, MEISTER, and NASE, <u>Administrative Patent Judges</u>.

MEISTER, <u>Administrative Patent Judge</u>.

## DECISION ON APPEAL

Anthony C. Shucosky and William P. Seeley (the appellants) appeal from the final rejection of claims 1-5, the only claims present in the application. We reverse.

The appellants' invention pertains to a pleated filter cartridge having a poly(tetra-fluoro ethylene), i.e., PTFE,

<sup>&</sup>lt;sup>1</sup> Application for patent filed May 10, 1994. According to appellants this application, is a continuation of Application 07/883,122, filed May 14, 1992, which is a continuation-in-part of Application 07/792,621, filed November 15, 1991, both abandoned.

membrane filter medium. Claim 1 is further illustrative of the appealed subject matter and reads as follows:

1. In a pleated filter cartridge having a poly(tetra-fluoro ethylene) membrane filter medium, the improvement comprising:

providing a continuous support web on both faces of said membrane and pleated with said membrane, wherein said web is a nonwoven paper of thermally bonded poly(tetra-fluoro ethylene) fibers, said web has a thickness of less than about 0.2 mm, and said web is substantially free of materials other than poly(tetra-fluoro ethylene).

The references relied on by the examiner are:

Ashelin et al.	(Ashelin)	5,154,827	Oct. 13, 1992 (filed Jan. 22, 1990)
Kawai et al.	(Kawai)	5,158,680	Oct. 27, 1992 (filed May 30, 1989)

Claims 1-5 stand rejected under 35 U.S.C. § 103 as being unpatentable over Ashelin in view of Kawai. On page 3 of the answer the examiner makes the following findings with respect to Ashelin and Kawai:

Ashelin discloses a PTFE plural membrane filter cartridge and Kawai et al. teach a non-woven PTFE fibrous membrane media for filter cartridges.

It is apparently the examiner's position that (1) it would have been obvious to form the individual membranes in the "plural membrane" filter element of Ashelin from "non-woven PTFE fibrous" membranes in view of the teachings of Kawai and (2) the outermost

membranes in the plural membrane filter element of Ashelin, as modified by Kawai, would satisfy the claimed limitation of a "continuous support web on both faces" of the membrane.

We cannot agree with the examiner that the combined teachings of Ashelin and Kawai either teach or suggest the subject matter defined by independent claim 1. Specifically, there is absolutely nothing in Kawai which would teach or suggest "a nonwoven paper of thermally bonded PTFE fibers" as the examiner apparently believes. As the examiner recognizes, Kawai teaches a method of making a porous PTFE membrane having either a hollow fiber construction or a sheet-like construction made from "a poly-resin dispersion and a fiber or film forming (referred to [as] film forming hereunder) polymer"<sup>2</sup> (see column 1, lines 54-58). Kawai thereafter states that the method includes the steps of:

forming a film having a hollow construction or a sheet-like construction from a mixture of a polytetrafluoro-ethylene resin dispersion<sup>3</sup> and a film-forming polymer; heat-treating the film at a temperature not lower than

<sup>&</sup>lt;sup>2</sup> It thus appears that Kawai utilizes the terminology "fiber forming" and "film forming" synonymously.

<sup>&</sup>lt;sup>3</sup> This dispersion is subsequently stated to contain "PTFE resin **particles** of a particular size . ." (see column 3, lines 60-61; emphasis ours).

the melting point of the resin; and effecting the following steps (1) and (2) in either order on the heat-treated film:

- (1) removing the film-forming polymer, and
- (2) mounting the film or membrane and sealing an end of the case with a fluoro-resin so as to form flow channels through the membrane. [Column 2, lines 2-12; footnote added.]

There is, however, nothing in Kawai to indicate that the "sheet-like construction" comprises "a nonwoven paper of thermally bonded PTFE fibers" as the final end product. To the contrary, independent claims 1 and 6 of Kawai (which are directed to a "porous film membrane" (independent claim 1) and a "membrane-type separator" (independent claim 6)) each expressly contain the limitation that membrane is "substantially devoid of a fibrillated portion," thus clearly indicating that the resultant sheet-like member contains no fibers whatsoever.

In view of the foregoing, we will not sustain the examiner's rejection of claims 1-5 under 35 U.S.C. § 103 based on the combined teachings of Ashelin and Kawai.

## REVERSED

WILLIAM E. LYDDANE Administrative Patent J	) udge ) )
JAMES M. MEISTER Administrative Patent J	) ) ) BOARD OF PATENT ) APPEALS udge ) AND ) INTERFERENCES ) )
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## APPEAL NO. 95-4865 - JUDGE MEISTER APPLICATION NO. 08/240,505

APJ MEISTER

APJ NASE

APJ LYDDANE

DECISION: REVERSED

Typed By: Jenine Gillis

**DRAFT TYPED:** 17 Feb 99

FINAL TYPED: